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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,622	07/30/2003	Kazuyoshi Tari	241037US-2 CONT	9117

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/12/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/629,622

Applicant(s)

TARI ET AL.

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Specification

1. Specification is objected to, because of incorporation by reference of Japanese Patent Application on page 32. The incorporation of essential material in the specification by reference to foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 7 limitations directed to “a computer recording medium recording a radio processing program” are non-statutory matter, see Interim Guidelines for examination of patent applications for patent subject matter eligibility, pages 52-54 for details.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not provide sufficient details to enable a skilled in the art to make and use the invention because it does not adequately describe the following:

Regarding claim 7, how to read and write on computer-readable recording medium, defined in the specification as communication lines, including telephone lines.

The specification does not provide enough details about the structure and operation of the elements associated with the above identified claimed features to enable one skilled in the art to make and use the invention without undue experimentation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the content" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the content" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claims 1-6 limitations, directed to “base station radio unit connected to its own self”, are unclear as written.

Claim 7 limitations directed to “base station radio unit connected to its own unit” are unclear as written.

Claims 4-6 recite the limitation "the periphery" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claims 4-6 limitations, directed to periphery of said base station radio unit are unclear, because it is not understood what is “periphery”, as the disclosure does not define what stations belong to “periphery” and what station are not considered “periphery”. It is unclear, if the term “periphery” is directed to adjacent base station cells or peripheral frequency slots.

Claims 1 and 7 limitations, directed to establishing wireless communication between mobile terminals and host servers, are unclear, because it is not understood if the connections between base stations and their corresponding servers are wireless, or the wireless communication limitations are directed only to the communication between the mobile station and the corresponding base stations. In addition, the limitations directed to “base station radio unit intervenes therebetween” do not clarify the claimed structure, as operation of “intervening” is unclear.

Claim 7 limitations, directed to computer-readable recording medium, are unclear, because it is not understood what is computer-readable medium to hold program dynamically for a short period of time.

Examiner requests clarification of the claims 1-7 language, because the claims are unclear and confusing due to the poor quality of translation.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 and 7 are rejected (as best understood) under 35 U.S.C. 102(e) as being anticipated by Clark (US 6,023,459).

9. Regarding claims 1 and 7, Clark teaches a radio communication processing unit and a process program which handles communication processing between each of mobile terminals and a host server connected to a network, with each of said plurality of mobile terminals being connected to at least one base station radio unit within a communication area of said base station radio unit connected thereto and existing within a radio communication network system in which a communication is established by wireless radio between said mobile terminals and said host server in a state where said base station radio unit intervenes therebetween (operation and management center 706, OMC, as shown on Fig. 7-12, including the software implementation shown on Fig. 8, controlling wireless network, wherein the wireless network comprise multiple

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base stations, BTS 602-604, in communication with wireless terminals, as disclosed on 10:57-11:56), said radio communication processing unit comprising:

storage means for storing at least communication frequencies being used in all base station radio units existing within said radio communication network system (storage media of OMC apparatus, inherently storing base stations communication frequencies, because the frequencies are essential for creation of the frequency assignment plan for all base stations, as shown on Fig. 9 and 11 and disclosed on 13:20-14:5);

frequency setting means for determining, on the basis of the contents stored in said storage means, a communication frequency for use in said base station radio unit connected to its own self to set the determined communication frequency in said base station radio unit (engines 910 and 911 on Fig. 9 to generate frequency assignment plan for base stations based on the interference matrix 13:35-14:5);

reporting means for reporting channel information including information indicative of said base station radio unit connected to its own self and information indicative of said communication frequency being currently in use in said base station radio unit through said network system to each of different radio communication processing units (interference matrix generator 908 and input means to receive data on the channel interference on the used frequencies, as shown on Fig. 9 and 11); and

storage editing means for updating the contents stored in said storage means on the basis of said channel information given from said reporting means of said different radio communication processing unit (evaluation engine 911 to evaluate and update/optimize the assigned frequencies, as shown on Fig. 12 and 15:3-15:12).

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10. Regarding claim 2, Clark teaches requesting means, as ordering engine 909, shown on Fig. 9 and 12, wherein the ordering engine perform step 1204, as shown on Fig. 12, to request/order interference matrix data, comprising the data bases communication frequencies, as disclosed on 14:60-66.

11. Regarding claim 3, Clark teaches interference matrix data comprising communication frequencies with the content related to the interference, as disclosed on 13:20-51.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 4-6 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Clark.

Clark substantially teaches the limitations of the claims, including two conditions of the frequency assignment, as shown on Fig. 2, wherein the frequency assignment is performed according to first step, avoiding reusing frequency in the cells immediately adjacent to the central cell 20, and second step, avoiding reuse of the central frequency of cell 20 in the next adjacent cells, as disclosed on 2:33-52

Clark does not teach assigning frequencies starting from the highest available frequency.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add assigning frequencies starting from the highest available frequency to the

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system of Clark, as a design choice, because starting assignment from the lowest available frequency will work in the system as well.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DMITRY LEVITAN
PRIMARY EXAMINER

Dmitry Levitan
Primary Examiner
Art Unit 2616